



# UNITED STATES PATENT AND TRADEMARK OFFICE

42

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,034	04/05/2000	Tongbi Jiang	3818.1US (98-887.1)	6830

7590

08/11/2003

James R Duzan  
Trask Britt & Rossa  
P O Box 2550  
Salt Lake City, UT 84110

EXAMINER

KANG, DONGHEE

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/543,034

Applicant(s)

JIANG, TONGBI

Examiner

Donghee Kang

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3 and 10 is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 19 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Acknowledgment***

1. Applicant's Response to Paper No.15 and amendment have been entered and made of Record (Paper No.16).

### ***Information Disclosure Statement***

2. Acknowledgment is made of receipt of applicant's Information Disclosure Statement (PTO-1449) filed June 26, 2002.

### ***Drawings***

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on June 24 2003 have been approved.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the phrase "*all of said electrical connection area is directly connected to at least one output electrical connection of said semiconductor device*" in claims 1 & 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

5. Claims **1 & 15** are objected to because of the following informalities: The phrase "said electrical connection area disposed on said semiconductor die active surface

wherein all of said electrical connection are is directly connected to at least one output electrical connection of said semiconductor device” is misdescriptpive. Examiner suggests “wherein said electrical connection area disposed on said semiconductor die active surface is directly connected to at least one output electrical connection of said semiconductor device”. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. Claims 1, 4-9 and 11-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re claims1 & 15: The phrase “all of said electrical connection area is directly connected to at least one output electrical connection of said semiconductor device” is not supported by disclosure. The disclosure describes only electrical connections (136) are attached between the electrical connection area (134) and traces (138), which are in electrical communication with electrical component either internal or external to the semiconductor substrate (104). See page 14, in lines 4-10. Thus, the electrical connection area (134) of this application is not directly connected the output electrical connection rather than through traces.

Claims 4-9 & 11-14 are rejected because each includes the limitations of independent claim 1.

***Allowable Subject Matter***

7. Claims 2-3 & 10 are allowed.

The following is an examiner's statement of reasons for allowance:

Yew et al. fail to teach or suggest the width of adhesive tape extends beyond the edge of the semiconductor substrate opening and edge of the semiconductor die. It is desirable to improve the ability to visually inspect for proper attachment of the semiconductor chip to the semiconductor substrate.

Yew et al. fail to teach or suggest a composition of the first adhesive differs from a composition of the second adhesive. The use of differing adhesives compensates for the disparity in thermal expansion values typically existing between semiconductor substrate and semiconductor chip. Accordingly, one of ordinary skill in the art would not have been motivated to modify the teaching of Yew et al. to meet the claimed limitation.

***Additional Remark***

8. The lack of an art rejection with this office action is not an indication of allowable subject matter (i.e., even though the claims are rewritten or amended to overcome the rejection under U.S.C. 112 as discussed above). The disclosure/claimed language is such that it is impractical to conduct a reasonable search of the prior art by the Examiner.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghee Kang whose telephone number is 703-305-9147. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 703-308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Donghee Kang*

Donghee Kang  
Examiner  
Art Unit 2811

dhk  
August 6, 2003